

Table 2: Relative Requirements of B for Some Agronomic and Horticultural Crops

Grain, fiber and oilseed crops		
High	Intermediate	Low
Canola	Corn	Barley
Cotton	Flax	Rice
Eucalyptus	Grain sorghum	Rye
Oil palm		Soybean
Sunflower		Wheat
Forage crops		
High	Intermediate	Low
Alfalfa	Coastal bermudagrass Clovers	Grasses
Fruit and nut crops		
High	Intermediate	Low
Apple	Citrus	Pecan
Grape	Peach	Pineapple
Olive	Pear	Strawberry
Peanut	Tomato	
Vegetable crops		
High	Intermediate	Low
Beet	Brussels sprout	Bean
Broccoli	Cabbage	Cucumber
Carrot	Onion	Melons
Cauliflower	Peppers	Pea
Celery	Potato	Pumpkin
Rutabaga	Spinach	Squash
Turnip	Sweet Corn	Sweet Potato
Specialty crops		
High	Intermediate	Low
Carnation	Herbs	Rubber
Coffee	Tea	Sugarcane
Gladiolus	Tobacco	
Sugar beet	Turf	

TABLE 3.
Relative response of selected crops to micronutrient fertilizers.¹

Crop	Response to micronutrient					
	Mn	B	Cu	Zn	Mo	Fe
Alfalfa	low	high	high	low	medium	
Asparagus	low	low	low	low	low	medium
Barley	medium	low	medium	low	low	medium
Blueberry	low	low	medium			
Broccoli	medium	high	medium		high	high
Cabbage	medium	medium	medium	low	medium	medium
Carrot	medium	medium	medium		low	
Cauliflower	medium	high	medium		high	high
Celery	medium	high	medium		low	
Clover	medium	medium	medium	low	high	
Corn	medium	low	medium	high	low	medium
Cucumber	high	low	medium			
Dry edible bean	high	low	low	high	medium	high
Grass	medium	low	low	low	low	high
Lettuce	high	medium	high	medium	high	
Oats	high	low	high	low	low	medium
Onion	high	low	high	high	high	
Parsnip	medium	medium	medium		low	
Pea	high	low	low	low	medium	
Pepper	medium	low	low		medium	
Peppermint	medium	low	low	low	low	low
Potato	high	low	low	medium	low	
Radish	high	medium	medium	medium	medium	
Rye	low	low	low	low	low	
Snapbean	high	low	low	high	medium	high
Sorghum	high	low	medium	high	low	high
Soybean	high	low	low	medium	medium	high
Spearmint	medium	low	low	low	low	
Spinach	high	medium	high	high	high	high
Sudangrass	high	low	high	medium	low	high
Sugar beet	high	medium	medium	medium	medium	high
Sweet corn	high	medium	medium	high	low	medium
Table beet	high	high	high	medium	high	high
Tomato	medium	medium	high	medium	medium	high
Turnip	medium	high	medium		medium	
Wheat	high	low	high	low	low	low

¹ Highly responsive crops will often respond to micronutrient fertilizer additions if the micronutrient concentration in the soil is low. Medium responsive crops are less likely to respond, and low responsive crops do not usually respond to fertilizer additions even at the lowest soil micronutrient levels.

TABLE 2

Fifty major contributors of boron in the diet, based on CSFII 1994–1996¹ and the Boron Nutrient Database (version 2.0)²

Rank	Food category ³	Percent of total boron consumed	Cumulative percent of boron	Boron content ⁴ (µg/100 g)
1	Coffee	8.6	8.6	34
2	Wine	5.1	13.7	566
3	Orange/grapefruit juice	4.4	18.1	79
4	Milk	4.2	22.3	23
5	Other juice	4.0	26.3	202
6	Apples	3.6	29.9	273
7	Beans	3.2	33.1	216
8	Fried potatoes	2.7	35.8	147
9	Soft drinks/soda	2.1	37.9	6
10	Bananas	2.1	39.9	137
11	Peaches/nectarines/plums	2.0	41.9	352
12	Potatoes, not fried	1.9	43.8	62
13	Soup	1.8	45.6	44
14	Nut/seed butters	1.8	47.3	1048
15	Nuts/seeds, whole	1.7	49.1	1214
16	Potato/corn/other chips	1.5	50.6	206
17	Pasta	1.5	52.2	44
18	Grapes	1.5	53.7	460
19	Pizza	1.5	55.2	83
20	Ready-to-eat cereal	1.5	56.7	128
21	Fruit drinks	1.5	58.2	18
22	Tea	1.5	59.6	11
23	Oranges, tangelos, etc.	1.4	61.1	215
24	Breads	1.4	62.5	33
25	Dried fruit	1.2	63.6	1870
26	Tomato sauce	1.1	64.7	132
27	Rice/grains	1.1	65.8	34
28	Lettuce	1.0	66.8	70
29	Other vegetables	1.0	67.8	119
30	Chili	1.0	68.8	136
31	Tomatoes	0.9	69.7	76
32	Mexican mixtures	0.9	70.7	93
33	Beef stews/pot pies/mixtures	0.9	71.6	55
34	Broccoli	0.9	72.4	165
35	Chicken mixtures	0.8	73.3	48
36	Fruit salads/other fruits	0.8	74.1	183
37	Carrots	0.7	74.8	141
38	Avocado, guacamole	0.7	75.6	1222
39	Applesauce/cooked apples	0.7	76.3	219
40	String beans	0.7	77.0	107
41	Beer	0.7	77.7	8
42	Cakes	0.7	78.3	100
43	Fish, not fried	0.6	78.9	74
44	Pears	0.6	79.5	204
45	Other melons	0.6	80.1	70
46	Cookies, brownies	0.6	80.6	112
47	Beef, burgers	0.5	81.2	23
48	Onions	0.5	81.7	168
49	Donuts, sweet rolls, etc.	0.5	82.2	69
50	Corn	0.5	82.7	57